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Qingquan Wu* (qingquan.wu@tamiu.edu), 5201 University Blvd, EMAP, TAMIU, Laredo, TX 78041. *The divisor class numbers of certain function fields.*

We investigate the Sylow p -subgroup of the divisor class groups of certain function fields of extension degree p . When $p=2$, this is Gauss' genus theory. However, when we try to generalize the research objects to singular curves, it seems that new techniques are necessary to explore this case. We strive to obtain a lower bound of the p -rank of the divisor class groups, which is about half of the size of the non-singular case.

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